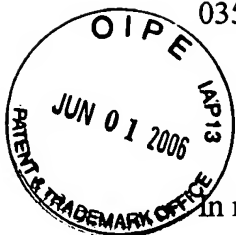


03500.018213

# PATENT APPLICATION



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

**In re Application of:**

SAKAE DUDA ET AL.

Application No.: 10/538,853

Filed: June 14, 2005

For: BLOCK POLYMER, POLYMER-CONTAINING COMPOSITION  
CONTAINING THE SAME, INK  
COMPOSITION AND LIQUID  
APPLYING METHOD AND  
LIQUID APPLYING APPARATUS  
UTILIZING THE POLYMER-CONTAINING COMPOSITION

**Examiner: Callie Shosho**

Group Art Unit: 1714

June 1, 2006

## Mail Stop Amendment

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

### SUBMISSION OF FOREIGN OFFICIAL LETTER

Sir:

Applicants request that the enclosed International Preliminary Report on Patentability, which was issued in a counterpart foreign application, be placed in the official file of this application.

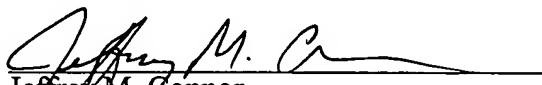
EP-A-0 670 222, EP-A-0 819 538, and EP-A-1 243 624, which are cited in the Official Letter, were previously cited in the Information Disclosure Statement filed on June 14, 2005, and therefore are not being submitted herewith.

It is believed that no fee is due in connection with the filing of this paper. If a fee is determined to be due, it may be charged to Deposit Account No. 06-1205.

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Applicants' undersigned attorney may be reached in our Washington D.C. office by telephone at (202) 530-1010. All correspondence should continue to be directed to our address given below.

Respectfully submitted,

  
Jeffrey M. Connor  
Attorney for Applicants  
Registration No.: 57,409

FITZPATRICK, CELLA, HARPER & SCINTO  
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JMC/gmc  
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DC\_MAIN 241862v1

# PATENT COOPERATION TREATY

# PCT

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44bis)

Applicant's or agent's file reference CFO18213WO	FOR FURTHER ACTION	See item 4 below
International application No. PCT/JP2004/009273	International filing date (day/month/year) 24 June 2004 (24.06.2004)	Priority date (day/month/year) 25 June 2003 (25.06.2003)
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237		
Applicant CANON KABUSHIKI KAISHA		

1. This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 bis.1(a).

2. This REPORT consists of a total of 7 sheets, including this cover sheet.

In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.

3. This report contains indications relating to the following items:

- |                                     |              |   |
|-------------------------------------|--------------|---|
| <input checked="" type="checkbox"/> | Box No. I    | Basis of the report   |
| <input checked="" type="checkbox"/> | Box No. II   | Priority  |
| <input type="checkbox"/>            | Box No. III  | Non-establishment of opinion with regard to novelty, inventive step and industrial applicability  |
| <input checked="" type="checkbox"/> | Box No. IV   | Lack of unity of invention  |
| <input checked="" type="checkbox"/> | Box No. V    | Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement |
| <input checked="" type="checkbox"/> | Box No. VI   | Certain documents cited   |
| <input type="checkbox"/>            | Box No. VII  | Certain defects in the international application  |
| <input type="checkbox"/>            | Box No. VIII | Certain observations on the international application   |

4. The International Bureau will communicate this report to designated Offices in accordance with Rules 44bis.3(c) and 93bis.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44bis.2).

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland	Date of issuance of this report 03 January 2006 (03.01.2006)
Facsimile No. +41 22 740 14 35	Authorized officer  <div style="text-align: center; font-weight: bold;">Masashi Honda</div>
Telephone No. +41 22 338 70 10	

Form PCT/IB/373 (January 2004)

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# PATENT COOPERATION TREATY

From the  
INTERNATIONAL SEARCHING AUTHORITY

To:

see form PCT/ISA/220

REC'D 24 NOV 2004

PCT

WIPO PCT

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY  
(PCT Rule 43bis.1)

Date of mailing  
(day/month/year) see form PCT/ISA/210 (second sheet)

Applicant's or agent's file reference  
see form PCT/ISA/220

**FOR FURTHER ACTION**  
See paragraph 2 below

International application No.  
PCT/JP2004/009273

International filing date (day/month/year)  
24.06.2004

Priority date (day/month/year)  
25.06.2003

International Patent Classification (IPC) or both national classification and IPC  
C08F297/00, C09D153/00

Applicant  
CANON KABUSHIKI KAISHA

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☒ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☒ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☒ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

2. **FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

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Name and mailing address of the ISA:



European Patent Office  
D-80298 Munich  
Tel. +49 89 2399 - 0 Tx: 523656 epmu d  
Fax: +49 89 2399 - 4465

Authorized Officer

Wirth, M

Telephone No. +49 89 2399-8595



**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

International application No.  
PCT/JP2004/009273

**Box No. 1 Basis of the opinion**

1. With regard to the language, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
  - ☐ This opinion has been established on the basis of a translation from the original language into the following language , which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
  - a. type of material:
    - ☐ a sequence listing
    - ☐ table(s) related to the sequence listing
  - b. format of material:
    - ☐ in written format
    - ☐ in computer readable form
  - c. time of filing/furnishing:
    - ☐ contained in the international application as filed.
    - ☐ filed together with the international application in computer readable form.
    - ☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

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**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

International application No.  
PCT/JP2004/009273

**Box No. II Priority**

1. ☒ The following document has not been furnished:

☒ copy of the earlier application whose priority has been claimed (Rule 43bis.1 and 66.7(a)).

☐ translation of the earlier application whose priority has been claimed (Rule 43bis.1 and 66.7(b)).

Consequently it has not been possible to consider the validity of the priority claim. This opinion has nevertheless been established on the assumption that the relevant date is the claimed priority date.

2. ☐ This opinion has been established as if no priority had been claimed due to the fact that the priority claim has been found invalid (Rules 43bis.1 and 64.1). Thus for the purposes of this opinion, the international filing date indicated above is considered to be the relevant date.

3. Additional observations, if necessary:

**Box No. IV Lack of unity of invention**

1. ☒ In response to the invitation (Form PCT/ISA/206) to pay additional fees, the applicant has:

☒ paid additional fees.

☐ paid additional fees under protest.

☐ not paid additional fees.

2. ☐ This Authority found that the requirement of unity of invention is not complied with and chose not to invite the applicant to pay additional fees.

3. This Authority considers that the requirement of unity of invention in accordance with Rule 13.1, 13.2 and 13.3 is

☐ complied with

☒ not complied with for the following reasons:

see separate sheet

4. Consequently, this report has been established in respect of the following parts of the international application:

☒ all parts.

☐ the parts relating to claims Nos.

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**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

International application No.  
PCT/JP2004/009273

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**Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

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**1. Statement**

Novelty (N)	Yes: Claims	
	No: Claims	1-12
Inventive step (IS)	Yes: Claims	
	No: Claims	1-12
Industrial applicability (IA)	Yes: Claims	1-12
	No: Claims	

**2. Citations and explanations**

see separate sheet

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**Box No. VI Certain documents cited**

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**1. Certain published documents (Rules 43bis.1 and 70.10)**

and / or

**2. Non-written disclosures (Rules 43bis.1 and 70.9)**

see form 210

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**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING  
AUTHORITY (SEPARATE SHEET)**

International application No.

**PCT/JP2004/009273**

MARUYAMA TOMOKO (JP)) 29 July 2004 (2004-07-29)

D5: EP-A-0 670 222 (CANON KK) 6 September 1995 (1995-09-06)

D6: EP-A-0 819 538 (CANON KK) 21 January 1998 (1998-01-21)

D7: EP-A-1 243 624 (CANON KK) 25 September 2002 (2002-09-25)

2. The hydration temperature is not a parameter usually used in the state of the art to define block copolymers. If a piece of state of the art fulfills all the other features of claim 1, this feature will also be considered fulfilled unless the applicant proves the contrary or gives convincing arguments.
3. D1 (see passages cited in the search report) discloses a triblock polymer comprising a triethylene glycol chain and comprising a first block having hydrophobicity (phenyl ethyl methacrylate), a block having ionic property (methacrylic acid) and a dimethylaminoethyl methacrylate/ethoxy triethylene glycol methacrylate block. The hydration temperature of this last block is not specified. However, for the reasons stated above, claim 1 is not considered novel. Should novelty be established, inventive step is also questionable since it is not clear what the contribution of this feature is for the solution of the technical problem stated on page 3. Indeed, comparative examples in which the hydration temperature is under 70°C seem also to lead to stable dispersions. The dependant claims do not seem to contain any feature which, in combination with claim 1, would render the claimed subject-matter novel/inventive.
4. The application apparatus and the head kit claimed in claims 11 and 12 are standard in the field of ink jet printers as shown in documents D5-D7 (see passages cited in the search report). It is also noted that the printer used in the examples (Canon BJF800) also anticipates these claims.

Re Item VI

D2-D4 are intermediate documents in which MOVE is used in the second block.

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